

LISTING OF THE CLAIMS

1.(previously presented) A terpolymer having an Erosion Rate in seawater that is suitable for use as a binder in a marine antifouling paint and having improved flexibility comprising a polymer of the formula -[A]-[B]- where A is present from above 9 to ~~about less than~~ 20 mole percent based on the total molar amount of monomers used to make the polymer(s) comprising the marine antifouling paint, and comprises one or more triarylsilyl(meth)acrylol groups (-XS₂R₃) wherein each R may be the same or different and is a substituted or unsubstituted aryl or heteroaryl group, X is the residue of an acryloxy or methacryloxy group; and B represents the residue of two-methyl methacrylate and one or more other different ethylenically unsaturated monomers copolymerizable with A, and wherein the terpolymer is characterized by an Erosion Rate in sea water of from 2 to 15 microns per month.

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2. (previously presented) The seawater erodible terpolymer of Claim 1 in which at least one R is an unsubstituted aryl, an aryl group substituted with one or more chlorine, fluorine, bromine, iodine, alkyl, perfluoroalkyl, napthyl, fluorenyl, anthracenyl, phenanthrenyl, pyrenyl, alkylether, substituted alkylether, aryloether, substituted aryloether, amino substituted group, or mixtures thereof.

3. (previously presented) The seawater erodible terpolymer of Claim 1 wherein A is triphenylsilylacrylate or triphenylsilylmethacrylate, and the polymer is characterized by an Erosion Rate in seawater of from 2 to 15 microns per month.

4. (previously presented) The seawater erodible terpolymer of Claim 1 in which at least one R is a sulfur-, nitrogen-, or oxygen-containing heteroaryl group.

5. (previously presented) The seawater erodible terpolymer of Claim 1 in which B is selected from the group consisting of unsaturated organic acids, esters of acrylic acid, esters of methacrylic acid, vinyl compounds, maleic esters, and fumaric esters.

6. (previously presented) The seawater erodible terpolymer of Claim 5 in which B is selected from methyl acrylate, ethyl acrylate, propyl acrylate, n-butyl acrylate, t-butyl acrylate, sec-butyl acrylate, 2-ethylhexyl acrylate, cyclohexyl acrylate, phenyl acrylate, n-octyl acrylate, 2-hydroxyethyl acrylate, hydroxy-n-propyl acrylate, hydroxy-i-propyl acrylate, glycidyl acrylate, 2-methoxyethyl acrylate, 2-methoxypropyl acrylate, methoxytriethyleneglycol acrylate, 2-ethoxyethyl acrylate, ethoxydiethyleneglycol acrylate, methyl methacrylate, ethyl methacrylate, propyl methacrylate, n-butyl methacrylate, t-butyl methacrylate, sec-butyl methacrylate, 2-ethylhexyl methacrylate, cyclohexyl methacrylate, 2-hydroxyethyl methacrylate, glycidyl methacrylate, 2-methoxyethyl methacrylate, 2-methoxypropyl methacrylate, methoxytriethyleneglycol methacrylate, and 2-ethoxyethyl methacrylate, hydroxy-n-propyl(meth)acrylate, hydroxy-i-propyl methacrylate, phenoxyethyl methacrylate, buoxy ethyl methacrylate, isobornyl (meth)acrylate, neopentyl glycolmethylether propoxylate acrylate, poly(propylene glycol) methylether acrylate, ethoxydiethyleneglycol methacrylate, acrylic acid, methacrylic acid, 2-butoxyethyl acrylate, crotonic acid, di(ethylene glycol) 2-ethylhexyl ether acrylate, di(ethylene glycol) methyl ether methacrylate, 3,3-dimethyl acrylic acid, 2-(dimethylamino) ethyl acrylate, 2-(dimethylamino) ethyl methacrylate, ethylene glycol phenyl ether acrylate, ethylene glycol phenyl ether methacrylate, 2(5H)-furanone, hydroxybutyl methacrylate, methyl-2(5H)-furanone, methyl trans-3-methoxyacrylate, 2-(t-butylamino)ethyl methacrylate, tetrahydrofuranyl acrylate, 3-tris(trimethylsiloxy)silyl propyl methacrylate, tiglic acid, trans-2-hexenoic acid, vinyl acetate, vinyl propionate, vinyl butyrate, vinyl benzoate, dimethyl maleate, diethyl maleate, di-n-propyl maleate, diisopropyl maleate, di-2-methoxyethyl maleate, dimethyl fumarate, diethyl fumarate, di-n-propyl fumarate, diisopropyl fumarate, styrene, vinyltoluene, alpha-methylstyrene, N,N-dimethyl acrylamide, N-t-butyl acrylamide, N-vinyl pyrrolidone, and acrylonitrile.

7. (previously presented) The seawater erodible terpolymer of Claim 1 wherein said polymer has a molecular weight in the range from 1,000 to 200,000 g/mol.

8. (cancelled)

9. (previously presented) A terpolymer comprising the reaction product of monomer A, where A comprises one or more triarylsilyl(meth)acrylates ($XSiR_3$) wherein each R may be the same or different and is a substituted or unsubstituted aryl or heteroaryl group, X is the residue of an acryloxy or methacryloxy group, with one or more ethylenically unsaturated monomers of group B wherein B represents two-methyl methacrylate and one or more other different ethylenically unsaturated monomers copolymerizable with A, in the presence of a polymerization catalyst or initiator and characterized by residue of monomer A in said polymer of above 9 to ~~about less than~~ 20 mole percent of the copolymer, and wherein the copolymer is characterized by an Erosion Rate in sea water of from 2 to 15 microns per month.

10. (previously presented) The terpolymer of Claim 9 where at least one R is selected from unsubstituted aryl, phenyl, aryl substituted by one or more chlorine, fluorine, bromine, iodine, alkyl, perfluoroalkyl, napthyl, fluorenly, anthracenyl, phenanthrenyl, pyrenyl, alkylether, substituted alkylether, aryloether, substituted aryloether; amino substituted group or mixtures thereof and the polymer is characterized by an Erosion Rate of from 2 to 15 microns per month.

11. (previously presented) The terpolymer of Claim 9 wherein monomer A is triphenylsilyl acrylate or triphenylsilyl methacrylate.

12. (previously presented) The terpolymer of Claim 9 wherein said polymer has a molecular weight in the range from 1,000 to 200,000 g/mol.

13. (previously presented) A terpolymer composition comprising the polymer of Claim 1 and an organic solvent.

14. (previously presented) The terpolymer composition of Claim 13 further comprising a stabilizing agent selected from a dehydrating agent, a zeolite, an acid neutralizer, an amino containing compound, an antioxidant, a chelator, and an alkoxy silane.

15. (previously presented) A terpolymer composition comprising the polymer of Claim 9 and an organic solvent.

16. (previously presented) The terpolymer composition of Claim 15 further comprising a stabilizing agent selected from a dehydrating agent, a zeolite, an acid neutralizer, an amino containing compound, an antioxidant, a chelator, and an alkoxy silane.
17. (previously presented) A self-polishing marine antifouling coating composition comprising the terpolymer of Claim 1, a toxicant, and a stabilizing agent, and characterized by an Erosion Rate in seawater of about 2 to 15 microns per month.
18. (original) The self-polishing marine antifouling coating composition of Claim 17 wherein said stabilizing agent is present in said composition from 0.1 to 10 weight percent based upon the weight of said composition.
19. (original) The self-polishing antifouling coating composition of Claim 17, further comprising rosin and rosin derivatives.
20. (previously presented) The self-polishing antifouling coating composition of Claim 19 in which the rosin and rosin derivatives are present in the range of 5 to 60 weight percent of the terpolymer.
21. (previously presented) A self-polishing antifouling coating composition for fresh water or brackish water applications comprising the terpolymer of Claim 1, a toxicant, and a stabilizing agent, and characterized by an Erosion Rate of about 2 to 15 microns per month in the fresh water or brackish water of the application.